

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEB 12 1997

In the Matter of)

Replacement of Part 90 by Part 88 to)
Revise the Private Land Mobile Radio)
Services and Modify the Policies)
Governing Them)

and)

Examination of Exclusivity and)
Frequency Assignment Policies of)
the Private Land Mobile Radio Services)

PR Docket No. 92-235

REPLY COMMENTS OF THE BOEING COMPANY

The Boeing Company, by its attorneys, hereby supports the comments that were filed in opposition to the letter filed on January 21, 1997 by the Industrial Telecommunications Association ("ITA") in the above-captioned proceeding.¹ As the world's largest manufacturer of commercial aircraft and a major user of private radio spectrum, Boeing has an intense interest in this proceeding.

In its initial comments on the Further Notice of Proposed Rulemaking ("Further Notice") in this proceeding, Boeing supported the general thrust of the Commission's proposal to consolidate private land mobile radio ("PLMR") services into a considerably fewer number of pools than the current twenty. Boeing, however, cautioned that truly private radio licensees

¹ See Public Notice, DA 97-206 (released Jan. 28, 1997).

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should not be consolidated into the same pool as commercial vendors and third party resellers. As Boeing explained, the potential auction of spectrum to, and interference risks from, commercial vendors and resellers would discourage the deployment of spectrally efficient technologies by truly private users.² To promote the efficient use of private radio spectrum, Boeing proposed a system of efficiency-based spectrum fees.³ It is the concern about the consolidation of incompatible uses of private radio spectrum that compels Boeing to intervene in support of the parties that filed comments in opposition to ITA's proposal.

I. THE VAST MAJORITY OF COMMENTERS OPPOSE THE ITA "TWO-POOL" PROPOSAL.

ITA's cover letter for its January 21 "blueprint" modestly states that its filing reflects "certain assumptions regarding the consolidation of radio services."⁴ These assumptions, however, are not shared by the majority of the parties that filed comments in response to ITA's proposal. A host of utility companies, led by UTC, objected to the ITA approach.⁵ In addition,

² See Comments of the Boeing Co., PR Docket No. 92-235, at 3-6, 12-13 (filed Nov. 20, 1995).

³ *Id.* at 10-12.

⁴ Letter of Mark E. Crosby to Michele C. Farquhar, Jan. 21, 1997, at 1.

⁵ Comments of UTC on ITA's Proposed Technical Blueprint (Feb. 7, 1997) [hereinafter all citations to comments and letters filed in this proceeding are to those filed on February 7, 1997, unless otherwise indicated], Comments of Public Service Electric and Gas Co.; letter of David C. Petersen, City of Austin, to William F. Caton; letter of William A. Andersen, Consumer Energy, to William F. Caton; letter of John H. Ng, Potomac Electric Power Co. to William F. Caton; letter of Marilou Ehrenberg, Pacific Gas and Electric Co. to William F. Caton; letter of Kenneth G. Palumbo, Washington Suburban Sanitary Comm'n, to William F. Caton; letter of Michael P. Sercer, Indianapolis Power & Light Co., to William F. Caton; letter of Robert S. Metz, Carolina Power & Light Co., to William F. Caton; letter of Jerry W. Goerz, Kentucky Utilities Co., to William F. Caton; letter of Michael E.

the Coalition of Industrial and Land Transportation Radio Users,⁶ Affiliated American Railroads,⁷ the American Petroleum Institute,⁸ the American Automobile Association,⁹ the Alarm Industry Communications Committee,¹⁰ manufacturers of medical telemetry products,¹¹ and companies operating in the forest products industry also opposed ITA's proposal.¹² Only a small number of commenters gaining new or additional frequencies or with interests in the commercial exploitation of private radio spectrum filed in support of ITA.¹³

At first glance, it may appear that the commenters opposing ITA's proposal are simply attempting to preserve the existing coordination process for parochial purposes, *i.e.*, to

Vorndam, City Public Service, to William F. Caton; letter of John A. Rimlinger, National Fuel Gas Co., to William F. Caton; letter of Warren D. Benditz, Detroit Edison Co., to William F. Caton.

⁶ Letter of Kenneth Siegel, *et al*, to William F. Caton.

⁷ Comments of Affiliated American Railroads on ITA "Blueprint."

⁸ Comments of the American Petroleum Institute.

⁹ Comments of the American Automobile Association with Respect to Industrial Telecommunications Association, Inc. Technical Blueprint for Frequency Use Limitations.

¹⁰ Comments of the Alarm Industry Communications Committee Association with Respect to Industrial Telecommunications Association, Inc. Technical Blueprint for Frequency Use Limitations.

¹¹ Comments on ITA Proposal of Hewlett-Packard Co.; letter of Jeffrey H. Olson, *et al*, attorneys for SpaceLabs Medical, Inc. to William F. Caton.

¹² Comments of Columbia Helicopters, Inc., Comments of Fruit Growers Supply Co., Comments of Robert T. Hughey, Tenneco Packaging, Inc; Comments of Westvaco Corp., Timberlands Division; Comments of Pope & Talbot, Inc.

¹³ Supplemental Comments of Motorola, ARINC Comments on ITA's Ex Parte Statement, Comments of the E.F. Johnson Co., Reply Comments of the Personal Communications Industry Ass'n.

retain access to a spectrum coordination process that has served their particular industry sector. This, however, is not the case. To the contrary, these commenters' objections all demonstrate that the public interest will not be furthered if truly private, safety-related, critical wireless applications are subject to the same "notify-only" coordination process that serves the interests of commercial vendors and resellers of excess capacity that are nonetheless classified as private mobile service licensees.¹⁴

II. THE COMMENTERS DEMONSTRATE THAT MORE THAN TWO POOLS ARE NECESSARY IN THE CONSOLIDATION OF PLMR SPECTRUM.

As Boeing and a number of other parties correctly observed in their comments on the Further Notice, many PLMR licensees use private radio solely to satisfy their specialized, but critical, communications needs related to their production of goods and provision of internal services. Few are involved, much less interested, in diversifying into communications-related businesses, but all are concerned -- in the long run -- with the efficient use of spectrum. The manner in which these truly private radio users employ spectrum is plainly incompatible with the manner in which commercial vendors and resellers use private spectrum. Notwithstanding this fact, ITA would place the truly private radio users in the same consolidated pool as vendors and resellers which, while relatively few in number, have a disproportionate share of PLMR licenses.

¹⁴ The "notify-only" coordination approach is included in the Joint Pool Consolidation Proposal of the Personal Communications Industry Ass'n, the Industrial Telecommunications Ass'n, the Alliance of Motion Picture and Television Producers, the Newspaper Ass'n of America, and the Telephone Maintenance Frequency Advisory Committee, PR Docket No. 92-235, at 8-10 (filed Nov. 20, 1995).

ITA's approach to consolidation would create an unacceptable risk of interference and, as a result, discourage private radio users from deploying spectrally efficient technologies.¹⁵

The ITA proposal would also create other risks. Commercial vendors and resellers view private radio spectrum as a revenue-generating asset. For this reason, they have a strong economic incentive to acquire as much spectrum as possible by any available means. Indeed, the history of private radio is unfortunately replete with examples of such acquisition through the coordination process and by redefining the terms of aggregate loading. The conversion of private radio spectrum to commercial applications constricts, rather than expands, the amount of spectrum available for truly private users, who cannot otherwise meet their highly specialized, but critical, communications needs.

The necessary coordination and concurrence process that assures private users of safe, interference-free spectrum use also serves as an important barrier to the homogenized commercialization of PLMR spectrum. If ITA's proposal were adopted, this barrier would be removed to the detriment of spectrum efficiency and the special needs of truly private industrial/utility users. As suggested by many of the parties filed comments, the Commission should consider these consequences in judging ITA's proposal.

¹⁵ See Comments of the Boeing Co., PR Docket No. 92-235, at 13 (filed Nov. 20, 1995).

III. THE COMMISSION SHOULD ADOPT A CONSOLIDATION PLAN THAT RETAINS A "STRICT-COORDINATION" PROCESS FOR CRITICAL INDUSTRIAL/UTILITY PRIVATE USE.

As UTC correctly points out, ITA's two-pool approach suffers from a significant flaw, namely, it does not distinguish between critical and non-critical services. Two critical applications used by Boeing in the manufacture of large commercial aircraft are those of mobile radio communications in "man-down" situations and remote control of overhead cranes. As UTC points out, it is "the FCC's mandate to provide radio service 'for the purpose of promoting safety of life and property.'"¹⁶ The reliability of the radio service that serves the safety needs of workers in industrial settings should not be subject to a "notify-only" assignment process that may be appropriate for non-critical communications.

Boeing agrees with API that ITA's proposal does not adequately protect those industrial licensees with industrial safety obligations. Boeing also joins API in urging the Commission to consider the quality of coordination that should apply to such important uses of private spectrum. Specifically, Boeing urges the Commission to adopt a consolidation plan that distinguishes services that should be subject to strict coordination, such as those involving industrial safety, from other private radio services that could be subject to a relaxed coordination standard.

User compatibility, as measured by similarity of coordination needs, must be a chief consideration in evaluating ITA's proposal. For this reason, Boeing supports the position espoused by the Coalition of Industrial and Land Transportation Radio Users ("Coalition"), which

¹⁶ Comments of UTC at 6 (citations omitted).

advocates consolidation that would address the specialized needs and requirements of the land mobile wireless user community through preservation of user-compatible groupings consistent with historical sharing patterns. Boeing takes this position not out of opposition to change, but because any efficient and effective consolidation approach must group users with similar coordination requirements.

The dangers of harmful interference because of coordination incompatibility would be compounded by the lessened quality of coordination espoused by ITA. A "notify-only" approach in a two-pool environment, such as advocated by ITA, would unduly curtail coordination and likely increase interference among the various users in the single non-public safety pool. Moreover, a single non-public safety pool coordinated on a "notify-only" basis would not meet the international coordination needs of U.S. and Canadian licensees above Line A, with which Boeing is intimately familiar.¹⁷ In any environment with a greatly reduced number of pools, it is all the more incumbent on the Commission to examine the goals and missions of frequency coordinating organizations, as well as their practices and quality standards. Boeing agrees with UTC that "[b]y consolidating all private wireless services other than public safety agencies into a giant homogenous pool, the Blueprint would reduce the private land mobile radio environment to the lowest common denominator, and the process sacrifice safety, reliability, and public service, simply for the sake of administrative efficiency"¹⁸ Incompatible uses in the same pool (*i.e.*,

¹⁷ See letter of Sheldon R. Bentley, Boeing Co., to William F. Caton, PR Docket no. 93-144, GN Docket No. 93-252; PP Docket No. 93-253 (July 22, 1996) (describing the unique circumstances of allocation of 800 MHz spectrum in the Canadian border region).

¹⁸ *Id.* at 10.

one "giant homogenous pool") will result in unacceptable frequency coordination standards and practices for some users, while overburdening others.

The dangers of harmful interference because of "one-size-fits all" pooling and lax coordination standards are not adequately addressed by protected service areas ("PSAs"). As the Coalition points out, PSAs are not a reality and the criteria for PSA authorizations have yet to be formulated.¹⁹ Moreover, creation of PSAs would limit sharing even among compatible users and would be impractical in congested areas. The answer here is not the untested geographic quasi-exclusivity that PSAs would provide, but a focussed approach to coordination among user groups with like coordination needs.

The deficiencies of the ITA proposal can only be remedied by 1) recognizing that commercial service providers, utilizing spectrum directly for profit (a completely different set of purposes than those of private wireless users) should not be included in spectrum allocated for private land mobile services, and (2) creating multiple pools with different but appropriate coordination standards for each. First, it is paramount that the Commission provide for a grouping of critical industrial/utility services, many of which are safety-related, that would enable closely-controlled or strict frequency coordination within that pool. Second, a "relaxed coordination" pool for private (non-vendor) users would offer a process to meet these users' further needs. Third, a pool for public safety services is likely appropriate. Individually, these pools should employ coordination principles and practices that will meet the most demanding need of any user in each of these pools. A significant reduction in the number of pools and

¹⁹ Coalition Comments at 5.

consolidation along the lines of user groups with like coordination requirements would encourage the deployment of spectrally efficient equipment and technologies by PLMR licensees that use private radio to satisfy their important internal communications needs.

IV. CONCLUSION

For all of the reasons set forth above and in its initial comments, Boeing urges the Commission to reject the ITA "two-pool" proposal. Instead, the Commission should adopt a system of no fewer than three pools, including a grouping of critical industrial services, to ensure that spectrum is fairly allocated and to promote its safe and efficient use.

Respectfully submitted,

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February 12, 1997